

400W HPS LUMINAIRE (RECTANGULAR)

I. Quantity

The base bid shall include the indicated number of 400W HPS luminaires to be furnished and installed as hereinafter specified.

II. Material

- a. Luminaire - The luminaire shall be suitable for attachment by means of a slip-fitter connection to a 2" IPS bracket. The slip-fitter shall include means for securely attaching the luminaire and shall also provide for adjustment of approximately 5 degrees above or below horizontal.

Each luminaire shall be furnished with an internally mounted 480 volt ballast. The ballast shall be a high power factor, three winding type with isolation between the two secondary windings and the primary winding. The ballast must provide a maximum of 14% wattage variation (measured along the left side of the lamp trapezoid) to a normal lamp when nominal input voltage varies within a range of + or -10%.

The starting circuit must provide a minimum starting pulse repetition rate of one pulse per half-cycle (symmetrical). The spike position must occur within a maximum of plus or minus 20 degrees of the center of the open-circuit voltage waveform. The pulse peak voltage should be a maximum of 3000 volts. Pulses must be provided in the same polarity as the open circuit voltage.

The starting circuit and ballast must be capable of starting and maintaining lamp burning in ambient temperatures as low as -20 degrees Fahrenheit. Ballast, starting circuit, and lamp socket shall be pre-wired and ready for installation; all of which shall be readily accessible for maintenance purposes. Each luminaire starting circuit and ballast shall be factory tested and matched to assure proper component tolerances and pulse parameters.

Optical Assembly shall consist of a reflector having a multifaceted surface finished with a highly specular coating and a polycarbonate refractor.

Luminaire housings both upper and lower, shall be die-cast aluminum, joined by an integrally cast hinged pin at the mounting end. A one hand latch for the refractor door shall be provided.

Luminaire finish shall be baked on, Statuary Bronze acrylic enamel.

Hardware shall be of corrosion-resistant materials.

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Slip-fitter shall be adaptable to 1 1/4" to 2" mast arms.

Gaske shall be high temperature dacron polyester "breathing seal" to filter contaminants

from optic system.

The luminaire shall be American Electric Catalog Number 154-76643-8TH or approved equal.

- b. Lamp - The high pressure sodium lamps shall be 400 watt, with a rated life of 24,000 hours equal in quality, design, and performance to General Electric Co. LU400.

III. Installation

The 400w HPS luminaires shall be installed as shown on the drawings and as indicated in the field by the engineer.

IV. Quotation

The 400W HPS luminaire shall be quoted as a unit price each in the appropriate place of this document.